

that real labour-pains were present. He summed up the cases in which chloroform was advisable, as those in which it allayed excessive irritability, and mitigated unusual pain—in the operations of midwifery, in which it not only facilitated the proceedings of the obstetrician, but relieved the intensity of the suffering consequent upon such interference. * * *

Dr. Rein was not an opponent to the use of chloroform in obstetric practice. He had, however, never advocated its employment, and his experience of late had tended to make him think less favourably of it than he formerly did. He entered at some length into three cases in which he had employed it. In the first instance, a lady who had always suffered severely during her first five confinements, in which he had attended her, but in all favourably recovered,—indeed, without a bad symptom,—had in her sixth confinement taken chloroform. He did not believe that it had at all diminished her sufferings, and from that hour to this, a period of three months, she had been a dreadful invalid, suffering from a train of nervous symptoms such as he had never witnessed, and of which Dr. Merriman only recollected one parallel instance in his vast practice, and that was the result of intense drunkenness. The chief symptoms in this case were most distressing sickness and headache. He believed a somewhat similar case had occurred to Dr. Fergusson. In other cases the chloroform had not relieved the pains of labour.—*London Med. Gaz.*, Feb. 2d, 1849.

MEDICAL JURISPRUDENCE AND TOXICOLOGY.

77. *Lunatic Asylum, Nantes—Question of Insanity.*—Patients are placed in the lunatic asylum at Nantes, either by their friends or by order of the authorities. The former is entitled *placements volontaires*, a term that does not indicate that the patient has entered of his own free will, although such examples occasionally occur, but that his friends have placed him there on the authority of a medical certificate, which should indicate his mental condition, the symptoms of his disease, and the necessity of treating his case in an asylum, and of keeping him in one. One of the persons thus admitted was a patient there for the second time. His insanity consisted, not in a delirium of words, but of actions; such as sensual appetites, a desire for continual motion, and the purchase of all sorts of articles without utility. M. Verdon, the physician to the asylum, certified that he was insane—that the disease affected the will and the character, rather than the ideas and the judgment, although the reason could not be said to be sound—that the insanity was characterized by a tendency to excesses of all kinds, to extravagant expenditure, and romantic and ridiculous eccentricities. M. Foville, of the Charenton, fully agreed with M. Verdon, that the patient was a fit person to be admitted into the asylum; but, notwithstanding, on the perusal of their certificates, and the reading of a letter written by the person, he was set at liberty by the authorities. The reporter observes on this case, that justice is always unwilling to consider a man insane who can write a reasonable letter, and sustain a long conversation without any wandering in his ideas. Extraordinary actions, excesses, extravagant expenditure, and romantic and ridiculous eccentricities, it refers to a bad education and pernicious habits.

The difficulty of this limitation, however, says M. Bouchet, the reporter, which equally exists for the disease of the intellectual faculties, ought not to prevent our acknowledging this species of insanity, which, without affecting the intellect, acts more especially on the moral principles. Psychologists have distinguished three distinct groups of the faculties of the soul—sensibility, intellect, and the will: sensibility, which comprises the pleasures and the pains, the appetites, the desires, and the more or less reflective tendencies, that is, the sentiments; the intellect, that is, the ideas, the notions, the thoughts; and the will, which comprises the determinations and the resolutions, in a word, action. This latter faculty is the result of the co-operation of the other two, or of one of the two. Sensibility, intellect, and the will decompose in the psychological as in the material order, and act together, or are separated more or less completely in the pathological order. In order that man may be in the full possession of reason, there must be a simultaneous action of these three faculties in

their regular or habitual course; but if, under certain organic dispositions produced by disease, the equilibrium is lost between these different forces, the mental faculties, which comprise the moral as well as the intellectual feelings, are changed in their manifestations, and mental alienation is the result. The conscience itself can no longer prevent the wanderings of the faculties; influenced by internal sensations, it seeks its impressions in the deposed notions and recollections of the intellect, as well as in the deposed feelings of sensibility. With these elements it judges actions; thus it justifies murder with Brutus and Charlotte Corday, suicide with Cato, and persecution with Philip the Second and Robespierre. The lunatic who has a knowledge of the morality of his actions, without the power of controlling them, or preventing their wanderings, judges and thinks rightly, but he feels wrongly; and this perverted feeling, superexcited by disease, commands the will, which directs the action in spite of his judgment, the healthy state of which has rendered it powerless.

It is not, therefore, necessary that a patient should wander in his ideas, judgment, reasoning, and language, in order that he be declared insane; it is enough that he shows it by eccentric and abandoned actions, caused by a diseased imagination, which the judgment is incapable of controlling. If, in the sequestration of the insane, a separation should be made between those whose insanity was indicated by their words, and those who evinced it by their actions, there would be but little room for hesitation. The latter ought to be submitted to sequestration rather than the others, because perversions of the sensibility cause more injury in social life than the perversions of the intellect.

In dementia, the manifestations of insanity are less evident, because all the faculties are merely weakened, (*affiblis*.) The disorder often ceases, as regards words and actions, but the patient speaks and does little: he replies at greater length than to questions, and his actions are more routine than voluntary. The manifestations of delirium take place only under some excitement influencing the intellect or the sensibility, which gradually become weaker, so as, at last, not to be influenced by any excitant. One can do as one will with these patients, except induce them to reason. They have lost the power of combination. When excited by more or less vivid impressions, the disorder returns, and its manifestations are often dangerous. Of this kind, two or three examples are given in the report. In one of these, the patient, a lawyer, having left an asylum apparently convalescent, while travelling in Switzerland, mixed with society, and also bathed in the sea. The result was, that in a few days, mental delirium was displayed in the form of all kinds of eccentricities, so that he was again placed in an asylum, labouring under insanity and general paralysis, and died, some months afterwards, at Charenton.

The next case exhibits, in a painful manner, the consequences of setting at liberty a man labouring under dementia. The patient was an old advocate; his complaint was demency, with general paralysis; his idea, the extent of his riches. He was placed in the asylum, and an interdiction obtained with respect to his property. Becoming apparently better, he was removed; relapsing, he was admitted into another asylum, whence he was withdrawn, on again improving. He then obtained the withdrawal of the interdiction, and at once plunged into a wild career of speculation, making also ridiculous purchases, until he had ruined his own fortune, and that of his children, when the disease carried him off.

With respect to the sequestration of the insane in asylums, it appears that in France a law passed in 1838, (article 8,) requires the medical man to state in his certificate, not merely the facts of the insanity, but also that the patient's sequestration is necessary, otherwise he cannot be received, unless the insanity be of a character to interfere with the public welfare, or to endanger the lives of individuals. M. Bouchet dwells somewhat on the difficulty of indicating precisely the characters of insanity which render a patient dangerous, and require him to be sequestered. He considers those persons who, in their insanity, offend against public order by wild cries, gesticulations, and menaces, and by causing alarm—the religious, sombre enthusiast, who fancies he does God service by committing murder—and, again, the man who fancies himself pursued and persecuted by imaginary enemies, to be among those who require sequestration; but the patient labouring under dementia, and the quiet idiot, may be, he thinks,

kept under the control of their respective families. Occasionally, he admits, they may revive from their apathy, and cause some annoyance to society, but this, he says, is but momentary, and not of a nature to necessitate sequestration.—*Journal of Psychological Med.*, Jan. 1849, from *Annales Medico-Psychologiques*.

78. *Early Menstruation and Pregnancy*.—Mr. JOHN SMITH relates in the *London Medical Gazette*, (Nov. 1848,) a case of a girl who commenced to menstruate at the age of ten years and six weeks, and had a regular return of the catamenia in somewhat profuse quantity until conception, and at the age of twelve and a half years, she gave birth to a living, and for the most part healthy infant.

MISCELLANEOUS.

79. *On Influenza and Ozone*.—Dr. SPENGLER, of Eltville, remarks, on the incomplete state of our knowledge of the etiology of epidemic diseases, that the present crude theories of their dependence upon certain indefinite degrees of heat or cold in the weather will no longer be admitted; but that, by following up the discovery of ozone by Schönbein, we shall, having a tangible point whence to start, arrive at the clearness of truth, instead of the darkness which has hitherto hung over the subject.

He states, that in the village of Roggendorf, in Mecklenburgh, towards the close of 1846, slight catarrhal affections became prevalent—that but slight trace of ozone was then to be detected in the air. With the opening of the following year, however, these catarrhal affections assumed the severest forms of tracheal and bronchial disease, and hooping-cough became common, both among children and adults; then re-agents detected a great increase of ozone in the atmosphere, and, at the same time, influenza spread over the district. On the 9th January, the *ozonometer* showed a still further increase in the proportion of ozone present in the air. On the same day two persons died of influenza, and gradually the influenza spread more extensively, until, on the 21st, scarcely an individual had escaped. Thus there seemed a decided connection between the presence of ozone in the air and the spread of the epidemic.

Ozone is formed in the air by the decomposition of its water through disturbances of its electrical equilibrium: hence the peculiar pungent sulphurous and phosphoric odour. The nature and composition remains as yet uncertain. Sulphuric, probably also telluric and selenic acids, and phosphoric acid, destroy it. A very small proportion of the vapours of ether or alcohol, or of olefiant gas, will also prevent its development.

Its best test is iodide of potassium, which will detect its presence in infinitely small quantities in the air. A piece of paper moistened with a mixture of starch and solution of iodide of potassium forms an *ozonometer* far exceeding in delicacy the most accurate galvanometer or the most sensitive nose. The smallest quantity of free ozone (even only in the proportion of a hundred-thousandth), when neither galvanometer nor eudiometer show any change in the air, will be rendered manifest by the discoloration produced by the free iodine.

At the beginning of the epidemic we have noticed there was but slight discoloration: it gradually became darker, till at last the *ozonometer* exhibited a blackish-brown colour.

As the presence of ozone in the air is due to its electrical decomposition, it is necessarily influenced by its electrical tension.

If the prevalence of influenza and epidemic catarrh be owing to ozone, the vapours of sulphur, or sulphurous gases, must be protective against it. This is confirmed by, while it explains the immunity of, those engaged in or living near sulphur-works.

Dr. Spengler has been induced to publish his observations with the hope of inducing others to make further investigations into the existence and nature of ozone.—*Lond. Med. Gaz.*, Feb. 2, 1849, from *Henle's Zeitschrift*, vol. vii., pt. i.